President's Address.

depth of 1350 feet has been reached in the Vale coal mine, and about half of that depth at Nanaimo on Vancouver Island.

Coal mining began in Nova Scotia as early as 1827. Since 1880 the annual production has exceeded oned a half million of tons and is now increasing yearly.

Coal was discovered on Vancouver Island in 1835, and mining was commenced by the Hudson Bay Co. in 1850. The first steamboat which ran on the North Pacific Coast was placed there in 1836 by the Hudson Bay Co., and is still in commission. The first locomotive also on that coast was imported for the Nanaimo Colliery.

Our total production of coal in 1886 was 2,091,976 tons, of which about 500,000 tons were exported chiefly by British Columbia. In that year we imported about 2,000,000 tons, nearly half of which was anthracite.

The gold production of British Columbia since 1858 amounts to \$50,000,000, and of Nova Scotia in the same period \$7,706,000.

The Crown Copper Mine at Capleton, Sherbrooke Co., Quebec, has reached a depth of 1520 feet on an inclined shaft, and the Albert mine at same place 810 feet. This is a sulphuret with about 4 per cent. copper, and has, after failing to pay as a copper mine, been successfully worked for sulphuric acid, the yield of copper paying all expenses, and thus giving the whole value of the acid for profit.

The Silver Islet mine in Lake Superior, which yielded millions before it was abandoned, reached a depth of 1160 feet, and the Shuniah 760 feet. Very valuable silver mines are now being worked west of Port Arthur, one of which, the Beaver mine, is reported to have millions in sight.

Our total mineral production for 1886 including structural materials is valued at \$10,529,361, of which coal made up five millions, and gold one and one-third millions:—petroleum, copper, phosphate, pig iron, silver, and asbestos rank next in value in the order named.

Some of the important discoveries in connection with mining engineering have been the result of accident. In boring for water petroleum was discovered, and in boring for the latter natural gas in the U. S., and rock salt in Canada, have been found. Petroleum had flowed out of Oil creek in Western Ontario as long ago as Indian tradition extends. It was gathered from the surface of the water by Indians, and was sold under the name of Seneca oil as a specific for rheumatism. This oil exuding from the ground had filled a low depression away from Oil creek, several acres in extent and several feet in depth. It had dried out, and become an ill-smelling, viscous, dark brown mass known as the "gum bed." Samples were sent to the Paris Exhibition in 1855, and found to yield paraffine wax. When the distillation of

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